1. Identification

1.1. Product identifier
Product Identity: Karnak #170 Tar Cement
Alternate Names: Karnak #170 Tar Cement

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use: Roof Cementing
Application Method: See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet
Company Name: Karnak Corporation
330 Central Ave.
Clark, NJ 07066 USA

Emergency
CHEMTREC (USA) (800) 424-9300
24 hour Emergency Telephone No. OUTSIDE THE U.S AND CANADA 1-202-483-7616
Customer Service: Karnak Corporation 1-800-526-4236

2. Hazard(s) identification

2.1. Classification of the substance or mixture
Flam. Liq. 3;H226 Flammable liquid and vapor.
Skin Irrit. 2;H315 Causes skin irritation.
Eye Irrit. 2;H319 Causes serious eye irritation.
Muta. 1B;H340 May cause genetic defects.
Carc. 1A;H350 May cause cancer.
Repr. 1B;H360FD May damage fertility. May damage the unborn child.
Aquatic Chronic 1;H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements
Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Danger
**Safety Data Sheet**
**Karnak #170 Tar Cement**

**Prevention:**
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
- P235 Keep cool.
- P240 Ground / bond container and receiving equipment.
- P241 Use explosion-proof electrical / ventilating / light / equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe mist / vapors / spray.
- P262 Do not get in eyes, on skin, or on clothing.
- P264 Wash thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves / eye protection / face protection.

**Response:**
- P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
- P308+313 IF exposed or concerned: Get medical advice / attention.
- P321 Specific treatment (see information on this label).
- P331 Do NOT induce vomiting.
- P332+313 If skin irritation occurs: Get medical advice / attention.
- P337+313 If eye irritation persists: Get medical advice / attention.
- P362 Take off contaminated clothing and wash before reuse.
- P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.
- P391 Collect spillage.

**Storage:**
- P403+233 Store in a well ventilated place. Keep container tightly closed.
P405 Store locked up.

[Disposal]:
P501 Dispose of contents / container in accordance with local / national regulations.

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal tar pitch</td>
<td>50 - 75</td>
<td>Carc. 1A;H350</td>
<td>[1][2][3]</td>
</tr>
<tr>
<td>CAS Number: 0065996-93-2</td>
<td></td>
<td>Muta. 1B;H340</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Repr. 1B;H360Fd</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Acute 1;H400</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Chronic 1;H410</td>
<td></td>
</tr>
<tr>
<td>Filler and Fiber</td>
<td>25 - 50</td>
<td>Not classified</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: MixtureFF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>10 - 25</td>
<td>Asp. Tox. 1;H304</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0064742-95-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Propanamine, 3-(isodecyloxy)-, acetate</td>
<td>1 - 5</td>
<td>Acute Tox. 4;H302</td>
<td>[1]</td>
</tr>
<tr>
<td>CAS Number: 0028701-67-9</td>
<td></td>
<td>Skin Corr. 1B;H314</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aquatic Chronic 1;H410</td>
<td></td>
</tr>
</tbody>
</table>

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

*The full texts of the phrases are shown in Section 16.

### 4. First aid measures

#### 4.1. Description of first aid measures

**General**
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation**
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes**
Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin**
If this product comes in contact with skin, remove material with mineral oil, then wash with soap and plenty of water.

**Ingestion**
If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed

Overview
Fumes from product can be unpleasant, may cause nausea, headache and irritating to eyes, skin, and respiratory tract. Reproductive or genetic defect hazard. See section 2 for further details.

Eyes
Causes serious eye irritation.

Skin
Causes skin irritation.

5. Fire-fighting measures

5.1. Extinguishing media
Water spray, carbon dioxide, dry chemical, foam

5.2. Special hazards arising from the substance or mixture
Avoid contact with skin and eyes. Avoid inhalation of vapors. Eliminate sources of ignition. Ensure adequate ventilation.
Keep away from heat / sparks / open flames / hot surfaces - No smoking.
Keep cool.
Ground / bond container and receiving equipment.
Use explosion-proof electrical / ventilating / light / equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist / vapors / spray.
Do not get in eyes, on skin, or on clothing.

5.3. Advice for fire-fighters
A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.
ERG Guide No. 130

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment (see section 8).
Avoid contact with skin and eyes. Avoid inhalation of vapors. Eliminate sources of ignition. Ensure adequate ventilation.

6.2. Environmental precautions
Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove
soiled clothing and wash thoroughly before reuse.

**6.3. Methods and material for containment and cleaning up**

Avoid contact with skin and eyes. Avoid inhalation of vapors. Eliminate sources of ignition. Ensure adequate ventilation.

Contain spillages with sand, earth or any suitable adsorbent material. Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorized waste disposal contractor.

Keep product out of sewers and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers or waterways. Assure conformity with applicable governmental regulations.

---

### 7. Handling and storage

**7.1. Precautions for safe handling**

Eliminate sources of ignition. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapors. Avoid release to the environment.

See section 2 for further details. - [Prevention]:

**7.2. Conditions for safe storage, including any incompatibilities**

Handle containers carefully to prevent damage and spillage.

Store at room temperature or in cool area.

Incompatible materials: Strong Oxidizers

See section 2 for further details. - [Storage]:

**7.3. Specific end use(s)**

No data available.

---

### 8. Exposure controls and personal protection

**8.1. Control parameters**

**Exposure**

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0028701-67-9</td>
<td>1-Propanamine, 3-(isodecyloxy)-, acetate</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0064742-95-6</td>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0065996-93-2</td>
<td>Coal tar pitch</td>
<td>OSHA</td>
<td>TWA 0.2 mg/m3 (benzene-soluble fraction) [1910.1002]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 0.2 mg/m3 A1, 1, Revised 2006,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>Ca TWA 0.1 mg/m3 (cyclohexane-extractable fraction)</td>
</tr>
</tbody>
</table>
Safety Data Sheet
Karnak #170 Tar Cement

SDS Revision Date: 01/28/2016

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0028701-67-9</td>
<td>1-Propanamine, 3-(isodecyloxy)-, acetate</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0064742-95-6</td>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0065996-93-2</td>
<td>Coal tar pitch</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: Yes; Suspected: Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>MixtureFF</td>
<td>Filler and Fiber</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Respiratory Use supplied-air respirator in confined areas or with vapors in high concentrations.
Eyes Wear protective eye glasses for protection against liquid splash.
Skin Avoid skin contact. Wear suitable protective clothing and gloves. Gloves should be changed if excessive exposure has occurred.
Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Black Paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Petroleum hydrocarbon</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not Measured</td>
</tr>
</tbody>
</table>
Melting point / freezing point: Not Measured
Initial boiling point and boiling range: > 152 °C (> 306 °F)
Flash Point: > 40.6 °C (> 105 °F) [Closed cup]
Evaporation rate (Ether = 1): Not available
Flammability (solid, gas): Not Applicable
Upper/lower flammability or explosive limits:
Lower Explosive Limit: Not Measured
Upper Explosive Limit: Not Measured
Vapor pressure (Pa): Not determined
Vapor Density: Not available
Specific Gravity: Not available.
Solubility in Water: Negligible
Partition coefficient n-octanol/water (Log Kow): Not Measured
Auto-ignition temperature: Not Measured
Decomposition temperature: Not Measured
Viscosity (cSt): Kinematic Viscosity (cSt) @ 40 °C > 20.5
Density: 1.25
9.2. Other information
No other relevant information.

10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
High temperatures and fires.

10.5. Incompatible materials
Strong Oxidizers

10.6. Hazardous decomposition products
11. Toxicological information

Acute toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LC50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LC50, mg/L/4hr</th>
<th>Inhalation Gas LC50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal tar pitch - (65996-93-2)</td>
<td>3,300.00, Rat - Category: 5</td>
<td>5,000.00, Rat - Category: 5</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Filler and Fiber - (MixtureFF)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic - (64742-95-6)</td>
<td>6,800.00, Rat - Category: NA</td>
<td>3,400.00, Rabbit - Category: 5</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>1-Propanamine, 3-(isodecyloxy)-, acetate - (28701-67-9)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
<th>Hazard Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>2</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>2</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>1B</td>
<td>May cause genetic defects.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>1A</td>
<td>May cause cancer.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>1B</td>
<td>May damage fertility. May damage the unborn child.</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>---</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

12. Ecological information

12.1. Toxicity
Very toxic to aquatic life with long lasting effects.
No additional information provided for this product. See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal tar pitch - (65996-93-2)</td>
<td>128.00, Pagrus major</td>
<td>&gt; 100.00, Daphnia magna</td>
<td>220.00 (72 hr), Desmodesmus subspicatus</td>
</tr>
<tr>
<td>Filler and Fiber - (MixtureFF)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light aromatic - (64742-95-6)</td>
<td>9.22, Oncorhynchus mykiss</td>
<td>6.14, Daphnia magna</td>
<td>19.00 (72 hr), Selenastrum capricornutum</td>
</tr>
<tr>
<td>1-Propanamine, 3-(isodecyloxy)-, acetate - (28701-67-9)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This product contains PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.

---

**13. Disposal considerations**

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.

---

**14. Transport information**

<table>
<thead>
<tr>
<th>DOT (Domestic Surface Transportation)</th>
<th>IMO / IMDG (Ocean Transportation)</th>
<th>ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1999</td>
<td>UN1999</td>
<td>UN1999</td>
</tr>
<tr>
<td>UN1999, Tars, liquid, 3, III</td>
<td>Tars, liquid</td>
<td>Tars, liquid</td>
</tr>
<tr>
<td>DOT Hazard Class: 3</td>
<td>IMDG: 3</td>
<td>Air Class: 3</td>
</tr>
<tr>
<td>Sub Class: Not Applicable</td>
<td>III</td>
<td>III</td>
</tr>
</tbody>
</table>

IMDG Marine Pollutant: Yes; (Coal tar pitch)
14.6. Special precautions for user
No further information

15. Regulatory information

Regulatory Overview
The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)
All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification
B3  D2A

US EPA Tier II Hazards
Fire: Yes
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):
Coal tar pitch

Pennsylvania RTK Substances (>1%):
Coal tar pitch

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our
products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H340 May cause genetic defects.
H350 May cause cancer.
H360Fd May damage fertility. Suspected of damaging the unborn child.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The information has been completed to the best of our knowledge and is believed to be accurate and reliable as from the date indicated. However, no warranty is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy oneself as to the suitability and completeness of such information for his own particular use.

End of Document